



PROJECT OVERVIEW

Project limits include Southdale Road West and Wickerson Road corridors between Wickerson Gate and Byronhills Drive

The EA will identify the requirements for improving the roads to a 2-lane standard:

- Significant improvements are required to the grade and cross-section of Southdale Road West and Wickerson Road



EXISTING NATURAL HERITAGE FEATURES

An Environmental Impact Study was completed to understand natural heritage features in the Study Area, including existing aquatic, terrestrial and wildlife conditions.

Natural Heritage features outside of the impacted areas will be mitigated.

LEGEND

1. Naturalized Coniferous Plantation
2. Dry-Fresh Sugar Maple-Oak Deciduous Forest
3. Dry Fresh Sugar Maple-Oak Deciduous Forest
4. Common Reed Graminoid Mineral Meadow Marsh
5. Cattail Graminoid Mineral Meadow Marsh
6. Dry-Fresh Mixed Meadow
7. Greenlands
8. Business Sector
9. Transportation
10. Sewage and Water Treatment
11. Single Family Residential
12. Rural Property
13. Annual Row Crops
14. Perennial Cover Crop
15. Open Pasture
16. Open Aquatic
17. Fencerow
18. Fresh-Moist Mixed Meadow



SUMMARY OF EXISTING REPORTS

Road Safety Strategy (RSS) 2014-2019

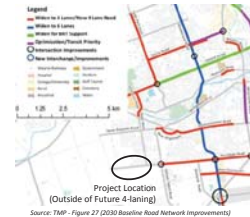
Recommendations fall under Action Item 12 in the RSS. This EA focuses on improvements to vertical profile, cross section (lane widths), and provisions for pedestrians and cyclists to provide a safer road environment.

ACTION No.	ACTION	DESCRIPTION
12	Roadway Alignment Improvement Program	Engineering improvements to horizontal and vertical alignments for reconstruction projects. Improved coordination with all 4R (reconstruction, rehabilitation, resurfacing, restoration) projects.

Source: RSS Table (Target Areas and Action)

Transportation Master Plan (TMP), May 2013

Outside of Future Widening Recommendations



Source: TMP - Figure 27 (2030 Baseline Road Network Improvements)

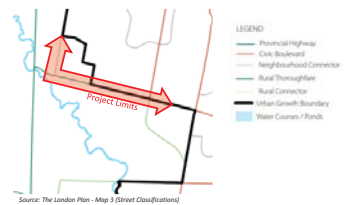
Secondary and Area Plans

N/A – outside limits

Official Plan (The London Plan, December 2016)

Street Classifications:

- Southdale Road West – Rural Thoroughfare
- Wickerson Road – Neighbourhood Connector



Source: The London Plan - Map 9 (Street Classifications)

EA PROGRESS REVIEW

Phase 1 (Completed) - The process involved the development of a Problem Statement:

Improvements are required to the grades and cross sections of Southdale Road West and Wickerson Road to meet the City's minimum design standards and improve road safety. The improvements will be planned and designed to:

- Implement the policies of the *London Plan**, *London ON Bikes Cycling Master Plan Update* and *2030 TMP*
- Avoid or minimize impacts to the Lower Dingman Corridor Environmentally Significant Area, surrounding farmlands, neighbourhoods, natural heritage features and cultural heritage features
- Incorporate required infrastructure and make provisions for future infrastructure, where feasible.



EA PROGRESS REVIEW

Phase 2 (Completed) - The process involved the development of alternative solutions for improvements to the roads.

Two alternative solutions were developed:

- **Do Nothing** – Southdale Road West and Wickerson Road would remain in the same condition with no improvements
- **Improvements** to Southdale Road West and Wickerson Road to meet minimum design standards
 - Alternative 1 – vertical and cross section reconstruction to meet design standards on the existing horizontal alignment
 - Alternative 2 – horizontal realignment of Southdale Road West and Wickerson Road outside of the current footprint of the roadway. This alternative would also include vertical and cross section reconstruction to meet design standards.

Alternative 2 was dismissed due to the significant impacts outside of the existing road footprint.



EA PROGRESS REVIEW



Phase 2 (Completed) - The process involved the development of alternative solutions for improvements to the roads.

Evaluation Factors		"Do Nothing"	Alternative 1
Road Design Standards	✗	Does not meet design standards	✓ Meets design standards
Traffic Operations and Safety	✗	Does not meet design standards	✓ Meets design standards
Opportunities for Active Mobility	✗	No opportunities	✓ Opportunities available
Opportunities for new infrastructure installation (watermain, etc.)	✗	No opportunities	✓ Opportunities available
Impacts on Natural Heritage	✓	No impacts	✗ Impacts
Impacts on Land Uses, Socio-Economic Environment and Cultural Heritage Resources	✓	No impacts	✗ Impacts

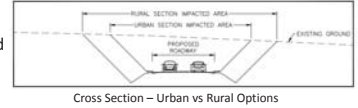
EA PROGRESS REVIEW



Phase 3 (Completed) - The process involved the evaluation of design options for implementing the preferred solution.

During the design development, several options were evaluated to minimize impacts to trees and the natural environment, including:

- Rural vs. Urban Cross Section**
 - Urban section was chosen to minimize footprint and manage stormwater
- Cut Slopes in constrained areas**
 - Options included: retaining walls/reinforced slopes/2:1 slopes
 - Standard 2:1 slopes were chosen to minimize cost, simplify construction, provide a more natural appearance and provide additional area for replanting on slopes with no significant increase in impacts to trees or vegetation



Cross Section – Urban vs Rural Options

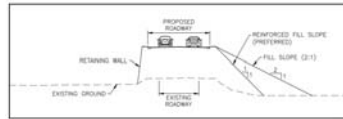
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EA PROGRESS REVIEW



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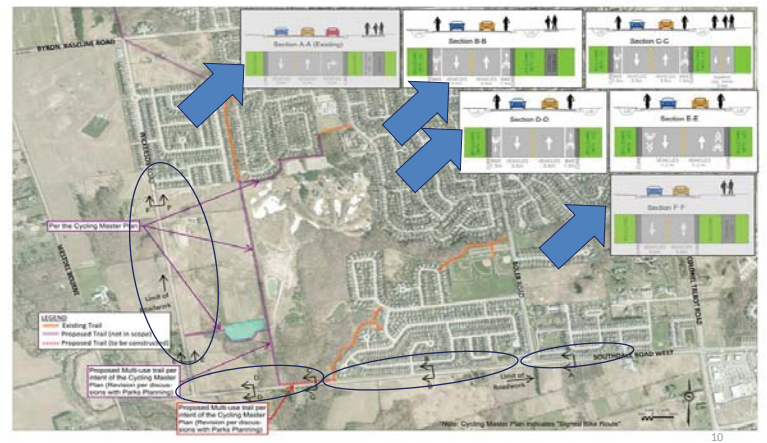
- Fill Slopes at culvert in valley** - Options included: retaining walls/reinforced slopes/2:1 slopes
 - 1:1 Reinforced slopes were chosen to minimize the footprint, provide a more natural appearance and minimize the length of culvert
- Profile Optimization** - Options included: standard (6% max) / substandard (8%) grades
 - Current profile was chosen to meet standards for arterial roads, manage cuts/fills and minimize driveway impacts
 - No significant benefit by increasing grades to 8%



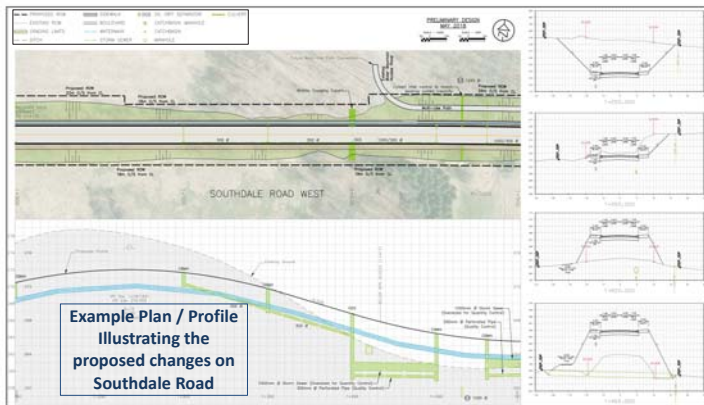
Cross Section – Fill Slope Options

- Stormwater Management** - Storm sewers and low impact developments (LIDs) will be implemented to manage stormwater
- Active Transportation** - Sidewalks to be provided on North side of Southdale Road/East side of Wickerson Road, multi-use trail to be implemented per cycling master plan and on-street bike lanes to be provided

PROPOSED ACTIVE TRANSPORTATION

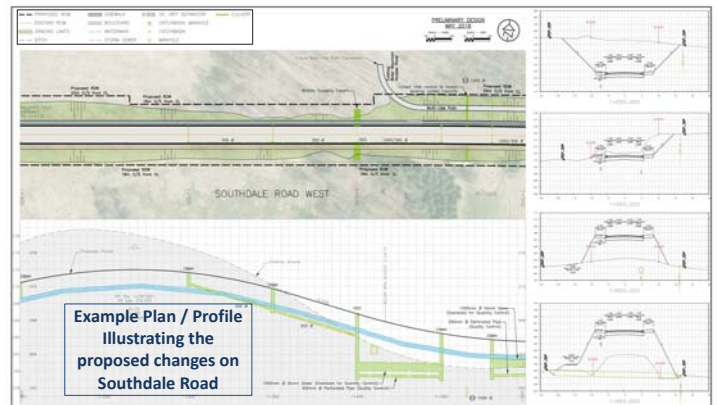


PHASE 3 - PREFERRED SOLUTION



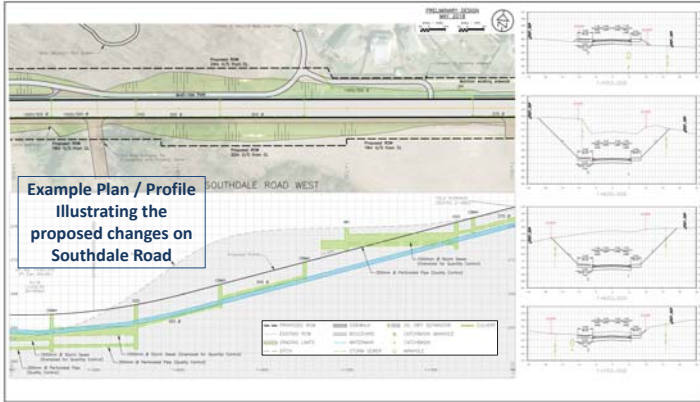
Example Plan / Profile illustrating the proposed changes on Southdale Road

PHASE 3 - PREFERRED SOLUTION



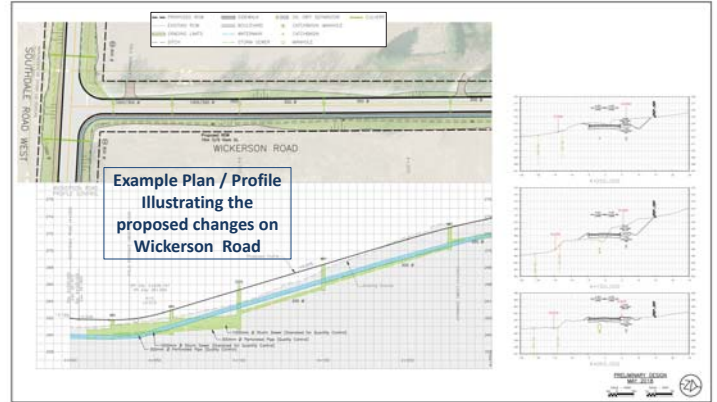
Example Plan / Profile illustrating the proposed changes on Southdale Road

PHASE 3 - PREFERRED SOLUTION



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PHASE 3 - PREFERRED SOLUTION



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NEXT STEPS



- Respond and update design based on input from the public and TAC committee
- Complete Environmental Study Report (ESR) – Summer 2018
 - Finalize EA document
 - Present EA document to council for endorsement
 - 30-day public and agency review period
- Detailed Design Phase – Anticipated to be 2018/2019
- Construction Phase – Anticipated to begin 2020

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